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Choice Supportive
Selective Perception
Overconfidence
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Biases
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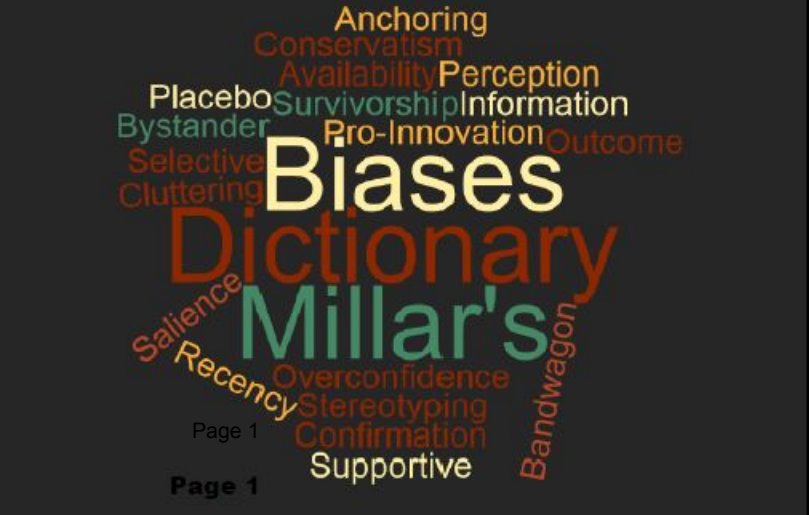
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Millar's

Dictionary of Cognitive Biases

SUBSTANTIALLY BASED ON INFORMATION PROVIDED IN WIKIPEDIA

AND

ROBERT TODD CARROLL, AUTHOR OF

THE CRITICAL THINKER'S DICTIONARY

AND

THE SKEPTIC'S DICTIONARY

-0-

DANIEL KAHNEMAN, AUTHOR OF

HEURISTICS AND BIASES

AND

THINKING FAST AND SLOW

AND THE COGNITIVE BIAS CODEX

BY JOHN MANGOONIAN AND BUSTER BENSON

-oOo-

Version:10 January 2017

Millar's

Dictionary of Cognitive Biases

substantially based on information provided in Wikipedia

and Robert Todd Carroll, author of The Critical Thinker's Dictionary

and The Skeptic's Dictionary, Daniel Kahneman, author of Heuristics and Biases

and Thinking Fast and Slow, and the Cognitive Bias Codex by John Mangoonian and Buster Benson

Version: 10 January 2017

Self Published by Graham Millar

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Disclaimer: I have merely collated the information provided by others. I am not a researcher as such.

You would need to clarify the information in this dictionary if it is to be used for professional purposes.

Millar's

Dictionary of Cognitive Biases

"Honest and sincere reasoners should accept that although they strive for objectivity, psychology tells us that to think of oneself as an objective judge actually tends to increase the role of subjective bias in thinking. One should aspire to objectivity without claiming that one has succeeded in achieving it" Philosopher Julian Baggini at page 241 of "The Edge of Reason: a rational skeptic in an irrational world", 2016.

Introduction

Why the interest in biases? Well two fold actually.

Firstly I am very interested in the fact that we all think we are acting rationally; when in fact we are all subject to a variety of ways of interpreting the world around us. Principally this lens is the biases to which we are, more or less prone, at different times and in different situations. Is it any wonder we all see the world differently!

Secondly I like and collect dictionaries. I could not find a dictionary of biases.

Searching Wikipedia, there is an alphabetical list but it does not seem to be comprehensive.

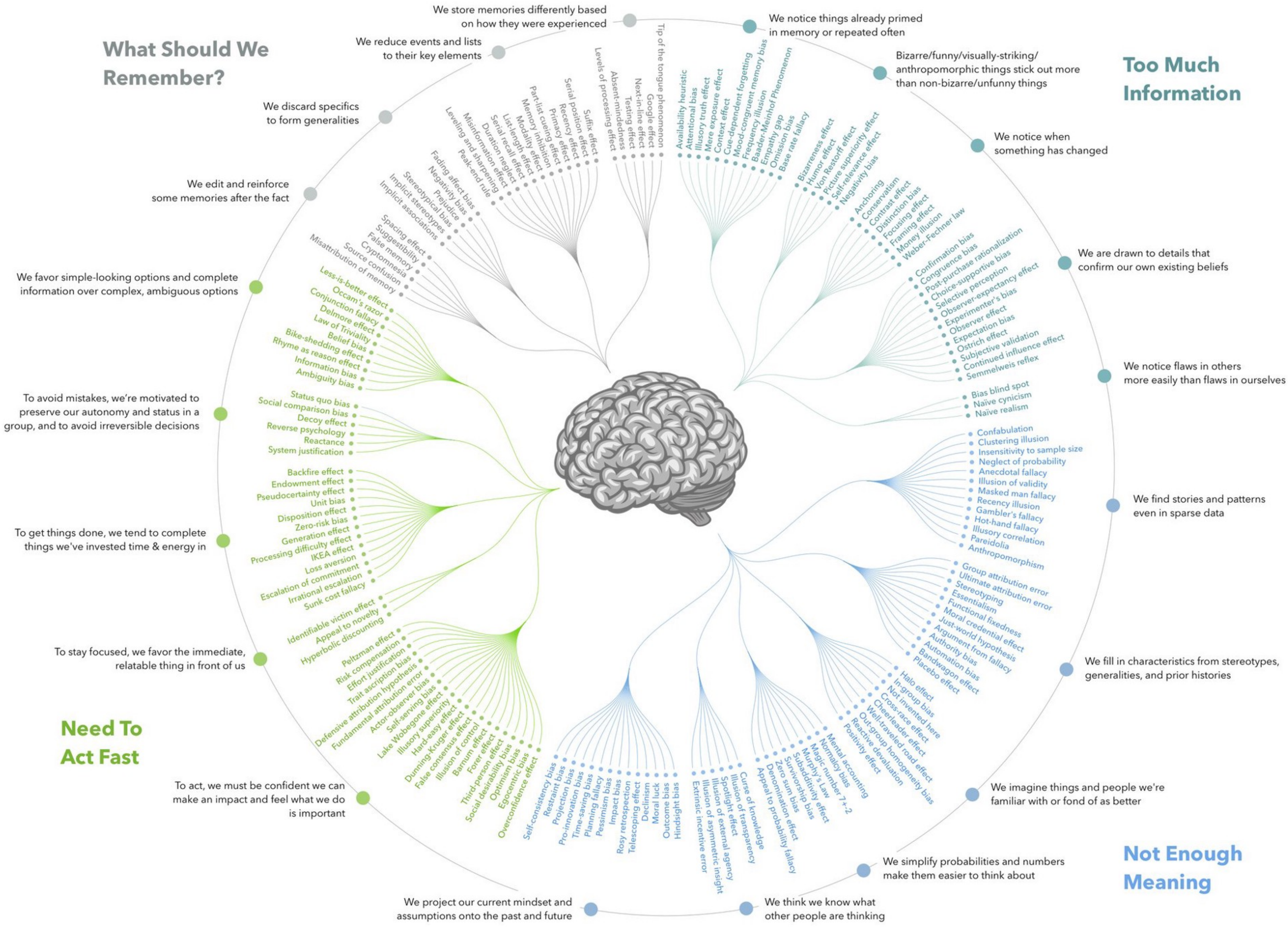
Which is when I stumbled on the Cognitive Bias Codex by John Mangoonian and Buster Benson. As they say what they found on Wikipedia was not a complete list. However in putting together their list of biases they also included some fallacies in this codex.

I have included these fallacies in this dictionary, just to be consistent with the Cognitive Bias Codex because it is such a good visual representation of the various categories of bias.

So then we have to define the difference between a bias and a fallacy: Biases are persistent and widespread psychological tendencies that can be detrimental to objectivity and rationality. Fallacies are mistakes of reasoning, as opposed to making mistakes that are of a factual nature.

Graham Millar, Sydney, 10 January 2017.

COGNITIVE BIAS CODEX, 2016



ALGORITHMIC LAYOUT + DESIGN BY JM3 · JOHN MANOOGIAN III // CONCEPT + METICULOUS CATEGORIZATION BY BUSTER BENSON // DEEP RESEARCH BY WIKIPEDIANS FAR + WIDE

			Cognitive Bias Codex Categories	
			Category	Sub Category
Number	**Name**	**Description**	1. Too Much Information 2. Not Enough Meaning 3. Need to Act Fast 4. What should we remember?	
1.	Absentmindedness	Absent-mindedness is where a person shows inattentive or forgetful behaviour.[1] It can have three different causes: 1. a low level of attention ("blanking" or "zoning out") 2. intense attention to a single object of focus (hyperfocus) that makes a person oblivious to events around him or her; 3. unwarranted distraction of attention from the object of focus by irrelevant thoughts or environmental events.[2]	4. What should we remember?	We store memories differently on how they are experienced.
2.	Acquiescence Bias	A tendency for a person to agree that something is true when they are unsure.		
3.	Actor–observer bias	The tendency for explanations of other individuals' behaviors to overemphasize the influence of their personality and underemphasize the influence of their situation (see also Fundamental attribution error), and for explanations of one's own behaviors to do the	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.

		opposite (that is, to overemphasize the influence of our situation and underemphasize the influence of our own personality).		
4.	Affect Bias	The tendency to make judgements based on feelings of liking or disliking something, with little input from deliberative reasoning		
5.	Ambiguity effect	The tendency to avoid options for which missing information makes the probability seem "unknown".[10]	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
6.	Anchoring or focalism	The tendency to rely too heavily, or "anchor", on one trait or piece of information when making decisions (usually the first piece of information acquired on that subject)[11][12]	1. Too Much Information	We notice when something has changed
7.	Anecdotal Bias	Anecdotal evidence is often unscientific or pseudoscientific because various forms of cognitive bias may affect the collection or presentation of evidence. For instance, someone who claims to have had an encounter with a supernatural being or alien may present a very vivid story, but this is not falsifiable. This phenomenon can also happen to large groups of people through subjective validation.	2. Not Enough Meaning	We find stories and patterns even in sparse data
8.	Anthropomorphism or personification	The tendency to characterize animals, objects, and abstract concepts as possessing human-like traits, emotions, and intentions.[13]	2. Not Enough Meaning	We find stories and patterns even in sparse data
9.	Apophenia	Apophenia has come to imply a universal human tendency to seek patterns in random information, such as gambling.[5]		
10.	Argument from fallacy	Argument from fallacy is the formal fallacy of analyzing an argument and inferring that, since it contains a fallacy, its conclusion must be false.[1] It is also called argument to logic (argumentum ad logicam), fallacy fallacy,[2] fallacist's fallacy,[3] and bad reasons fallacy.[4] Fallacious arguments can	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories

		arrive at true conclusions, so this is an informal fallacy of relevance.[5]		
11.	Appeal to novelty	The appeal to novelty (also called *argumentum ad novitatem*) is a fallacy in which one prematurely claims that an idea or proposal is correct or superior, *exclusively* because it is new and modern. In a controversy between status quo and new inventions, an appeal to novelty argument isn't in itself a valid argument. The fallacy may take two forms: overestimating the new and modern, prematurely and without investigation assuming it to be best-case, or underestimating status quo, prematurely and without investigation assuming it to be worst-case.	3. Need to Act Fast	To stay focussed, we favour the immediate, relatable, thing in front of us.
12.	Appeal to probability	An appeal to probability (or appeal to possibility) is the logical fallacy of taking something for granted because it would probably be the case (or might possibly be the case).[1] Inductive arguments lack deductive validity and must therefore be asserted or denied in the premises.	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.
13.	Attentional bias	The tendency of our perception to be affected by our recurring thoughts.[14]	1. Too Much Information	We notice things already primed in memory or repeated often
14.	Attitude Polarization	A tendency to harden a belief or opinion after being challenged. For example, a manager who tentatively proposes a strategy but then strongly embraces it after it is challenged by her team.		
15.	Attribution bias	In psychology, an **attribution bias** or **attributional bias** is a cognitive bias that refers to the systematic errors made when people evaluate or try to find reasons for their own and others' behaviors.[1][2][3] People constantly make attributions regarding the cause of their own and others' behaviors; however, attributions do not always accurately mirror reality. Rather than		

		operating as objective perceivers, people are prone to perceptual errors that lead to biased interpretations of their social world.[4][5]		
16.	Authority bias	The tendency to attribute greater accuracy to the opinion of an authority figure (unrelated to its content) and be more influenced by that opinion.[79]	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
17.	Automation bias	The tendency to depend excessively on automated systems which can lead to erroneous automated information overriding correct decisions.[15]		
18.	Availability heuristic	The tendency to overestimate the likelihood of events with greater "availability" in memory, which can be influenced by how recent the memories are or how unusual or emotionally charged they may be.[16]	1. Too Much Information	We notice things already primed in memory or repeated often
19.	Availability cascade	A self-reinforcing process in which a collective belief gains more and more plausibility through its increasing repetition in public discourse (or "repeat something long enough and it will become true").[17]		
20.	Baader-Meinhof phenomenon	Independent reports indicate that the name “Baader-Meinhof phenomenon” was coined on a discussion thread on the St. Paul Pioneer Press in ~1995. Participants were discussing the sensation, and decrying the lack of a term for it, so someone asserted naming rights and called it “Baader-Meinhof Phenomenon” presumably based on their own experience hearing that moniker twice in close temporal proximity. The more scientifically accepted name nowadays is “frequency illusion,” but Stanford linguistics professor Arnold Zwicky didn’t coin that term until 2006, over a decade after “Baader-Meinhof” was coined, and around the same time this article was originally	1. Too Much Information	We notice things already primed in memory or repeated often

		written. So both terms are arguably valid.		
21.	Backfire effect	The reaction to disconfirming evidence by strengthening one's previous beliefs.[18] cf. Continued influence effect.	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
22.	Bandwagon effect	The tendency to do (or believe) things because many other people do (or believe) the same. Related to groupthink and herd behavior.[19]	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
23.	Barnum effect	Also called the Forer effect, is the observation that individuals will give high accuracy ratings to descriptions of their personality that supposedly are tailored specifically for them but are, in fact, vague and general enough to apply to a wide range of people. This effect can provide a partial explanation for the widespread acceptance of some beliefs and practices, such as astrology, fortune telling, graphology, aura reading and some types of personality tests.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
24.	Base rate fallacy or Base rate neglect	The tendency to ignore base rate information (generic, general information) and focus on specific information (information only pertaining to a certain case).[20]	1. Too Much Information	We notice things already primed in memory or repeated often
25.	Belief bias	An effect where someone's evaluation of the logical strength of an argument is biased by the believability of the conclusion.[21]	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
26.	Ben Franklin effect	A person who has performed a favor for someone is more likely to do another favor for that person than they would be if they had *received* a favor from that person.		
27.	Berkson's paradox	The tendency to misinterpret statistical experiments involving conditional probabilities.		
28.	Bias blind spot	The tendency to see oneself as less biased than other	1. Too Much	We are notice flaws in others

		people, or to be able to identify more cognitive biases in others than in oneself.[22]	Information	more easily than flaws in ourselves
29.	Bike-shedding effect	Parkinson's Law of Triviality, also known as bike-shedding or the bicycle-shed example, is C. Northcote Parkinson's 1957 argument that organisations give disproportionate weight to trivial issues. Parkinson demonstrated this by contrasting the triviality of a bike shed to a nuclear reactor. Later, Paul-Henning Kamp applied the law to software development and introduced the colour of the bike shed as the proverbial trivial detail receiving disproportionate attention.	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
30.	Bizarreness effect	Bizarre material is better remembered than common material.	1. Too Much Information	Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things
31.	Change bias	After an investment of effort in producing change, remembering one's past performance as more difficult than it actually was[89][*unreliable source?*]		
32.	Cheerleader effect	The tendency for people to appear more attractive in a group than in isolation.[23]	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
33.	Childhood amnesia	The retention of few memories from before the age of four.		
34.	Choice-supportive bias	The tendency to remember one's choices as better than they actually were.[24]	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
35.	Citation Bias	The citation or non-citation of research findings, depending on the nature and direction of the results. Authors tend to cite positive results over negative or null results, and this has been established over a broad cross section of topics.[23][24][25][26][27][28] Differential citation may lead to a perception in the community that an intervention is effective when it is not, and it		

		may lead to over-representation of positive findings in systematic reviews if those left uncited are difficult to locate.		
36.	Clustering illusion	The tendency to overestimate the importance of small runs, streaks, or clusters in large samples of random data (that is, seeing phantom patterns).[12]	2. Not Enough Meaning	We find stories and patterns even in sparse data
37.	Cognitive Dissonance	Cognitive dissonance is a sense of stress that results from inconsistent ideas or actions. It is commonly described as a desire for internal consistency. Cognitive dissonance is considered a common type of motivation that can be used to describe a wide range of behaviors. It is often used to explain why people may choose to ignore evidence that runs contrary to their beliefs or opinions. This behavior is the root of a number of cognitive biases such as cherry picking or the backfire effect. Another thought pattern related to cognitive dissonance is a tendency to assume that the unobtainable has little value, a bias known as sour grapes.		
38.	Cognitive Inertia	A general tendency for beliefs to endure even in the face of mounting evidence that suggests they are wrong.		
39.	Complexity bias	Complexity bias is the belief that complex solutions are better than simple ones. The term denotes an irrational preference for complexity over simple approaches that are faster, cheaper and safer. The following are common examples: Jargon: The assumption that someone knows what they are talking about because they use obscure terminology and big words. Math: The assumption that complex math must be accurate and more valuable than a qualitative		

		insight. Software: A preference for highly complex software to satisfy requirements that are comparatively simple.		
40.	Confabulation	Confabulation, false **memory**, or less often pseudomemory is a term in cognitive psychology defined as a recollection of something that never happened. This can range from something as minor as misremembering an item on a list to fabricating an entire detailed, vivid memory out of whole cloth. While it is intuitively obvious that memory is fallible, a great deal of pseudoscience and woo is built on the idea that all or at least some memory is infallible, as in much anecdotal evidence. This assertion is unsupported by current evidence. Memory, in essence, is not akin to a tape recorder but a process that reconstructs past experience. This makes it highly susceptible to errors.	2. Not Enough Meaning	We find stories and patterns even in sparse data
41.	Confirmation bias	The tendency to search for, interpret, focus on and remember information in a way that confirms one's preconceptions.[25]	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
42.	Congruence bias	The tendency to test hypotheses exclusively through direct testing, instead of testing possible alternative hypotheses.[12]	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
43.	Conjunction fallacy	The tendency to assume that specific conditions are more probable than general ones.[26]	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
44.	Conservatism (belief revision)	The tendency to revise one's belief insufficiently when presented with new evidence.[5][27][28]	1. Too Much Information	We notice when something has changed
45.	Context effect	That cognition and memory are dependent on context, such that out-of-context memories are more	1. Too Much Information	We notice things already primed in memory or

		difficult to retrieve than in-context memories (e.g., recall time and accuracy for a work-related memory will be lower at home, and vice versa)		repeated often
46.	Continued influence effect	The tendency to believe previously learned misinformation even after it has been corrected. Misinformation can still influence inferences one generates after a correction has occurred.[29] cf. *Backfire effect*	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
47.	Contrast effect	The enhancement or reduction of a certain perception's stimuli when compared with a recently observed, contrasting object.[30]	1. Too Much Information	We notice when something has changed
48.	Courtesy bias	The tendency to give an opinion that is more socially correct than one's true opinion, so as to avoid offending anyone.[31]		
49.	Creeping normality	Creeping normality is an objectionable change that is accepted because it occurs slowly. The term is often used to explain indifference to environmental change. For example, people may tolerate excessive smog in a particular city that worsens over decades. Such smog would be intolerable if it suddenly appeared but is accepted when people have time to adopt lower expectations for health and quality of life.		
50.	Cross-race effect	The tendency for people of one race to have difficulty identifying members of a race other than their own.	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
51.	Cryptomnesia	A form of *misattribution* where a memory is mistaken for imagination, because there is no subjective experience of it being a memory.[89]	4. What should we remember?	We edit and reinforce some memories after the fact
52.	Curse of knowledge	When better-informed people find it extremely difficult to think about problems from the perspective of lesser-informed people.[32]	2. Not Enough Meaning	We think we know what other people are thinking.
53.	Cue-dependent forgetting	Or retrieval failure, is the failure to recall information without memory *cues*.[1] The term either pertains to *semantic cues*, *state-dependent* cues or *context-*	1. Too Much Information	We notice things already primed in memory or repeated often

		dependent cues.		
54.	Declinism	The belief that a society or institution is tending towards decline. Particularly, it is the predisposition to view the past favourably (rosy retrospection) and future negatively.[33]	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
55.	Decoy effect	Preferences for either option A or B change in favor of option B when option C is presented, which is similar to option B but in no way better.	3. Need to Act Fast	To avoid mistakes, we are motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions.
56.	Defensive attribution hypothesis	Attributing more blame to a harm-doer as the outcome becomes more severe or as personal or situational similarity to the victim increases.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
57.	Delmore Effect	As defined by Paul Whitmore PhD dissertation (unable to find a good copy online), is our tendency to provide more articulate and explicit goals for lower priority areas of our lives. It appears that the daunting nature of truly important goals may motivate the self to deflect this anxiety by attending to less important, but also less threatening goals.	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
58.	Denomination effect	The tendency to spend more money when it is denominated in small amounts (e.g., coins) rather than large amounts (e.g., bills).[34]	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.
59.	Disposition effect	The tendency to sell an asset that has accumulated in value and resist selling an asset that has declined in value.	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
60.	Dispositional attribution bias	The explanation of individual behavior as a result caused by internal characteristics that reside within the individual, as opposed to external (situational) influences that stem from the environment or culture in which that individual is found. **Dispositionalism** is the general tendency to prefer dispositional attribution rather than situational		

		attribution.[1]		
61.	Distinction bias	The tendency to view two options as more dissimilar when evaluating them simultaneously than when evaluating them separately.[35]	1. Too Much Information	We notice when something has changed
62.	Dunning–Kruger effect	The tendency for unskilled individuals to overestimate their own ability and the tendency for experts to underestimate their own ability.[36]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
63.	Duration neglect	The neglect of the duration of an episode in determining its value	4. What should we remember?	We reduce events and lists to their key elements
64.	Effort justification	Effort justification is an idea and paradigm in social psychology stemming from Festinger's theory of cognitive dissonance.[1] Effort justification is people's tendency to attribute a greater value (greater than the objective value) to an outcome they had to put effort into acquiring or achieving.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
65.	Egocentric bias	Occurs when people claim more responsibility for themselves for the results of a joint action than an outside observer would credit them with.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
66.	Empathy gap	The tendency to underestimate the influence or strength of feelings, in either oneself or others.	1. Too Much Information	We notice things already primed in memory or repeated often
67.	Endowment effect	The tendency for people to demand much more to give up an object than they would be willing to pay to acquire it.[37]	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
68.	Escalation of commitment	Escalation of commitment refers to a pattern of behavior in which an individual or group, when faced with increasingly negative outcomes from some decision, action, and investment, will continue rather than alter their course—something which is irrational, but in alignment with decisions and actions previously made.[1]	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.

69.	Essentialism	Essentialism is the view that certain categories (e.g., women, racial groups, dinosaurs, original Picasso artwork) have an underlying reality or true nature that one cannot observe directly. Furthermore, this underlying reality (or "essence") is thought to give objects their identity, and to be responsible for similarities that category members share. Although there are serious problems with essentialism as a metaphysical doctrine (Mayr, 1991), recent psychological studies converge to suggest that essentialism is a reasoning heuristic that is readily available to both children and adults.	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
70.	Evaluator bias	The bias that allows an evaluator to be influenced in their judgment role by his or her beliefs and prejudices in fundamental issues such as theories, values, methods, practice and common usage.		
71.	Exaggerated expectation	Based on the estimates, real-world evidence turns out to be less extreme than our expectations (conditionally inverse of the conservatism bias).[*unreliable source?*][5][38]		
72.	Expectation Bias	European Air Traffic Control (ATC) unit Eurocontrol defines ATC expectation bias as “Having a strong belief or mindset toward a particular outcome.” Hearing what we *expect* to hear is frequently listed as a causal factor for pilot deviations that occur both on the ground and in the air	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
73.	Extrinsic incentives bias	The extrinsic incentives bias is an attributional bias according to which people attribute relatively more to "extrinsic incentives" (such as monetary reward) than to "intrinsic incentives" (such as learning a new skill) when weighing the motives of others rather than themselves.	2. Not Enough Meaning	We think we know what other people are thinking.

74.	Experimenter's Bias	Research bias, also called experimenter bias, is a process where the scientists performing the research influence the results, in order to portray a certain outcome.	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
75.	Fading affect bias	A bias in which the emotion associated with unpleasant memories fades more quickly than the emotion associated with positive events.[91]	4. What should we remember?	We discard specifics to form generalities
76.	False Analogy	A false analogy is a type of fallacy that assumes that because things are similar in one respect that they are similar in other respects. Analogy is a powerful tool of thought that can be used to solve problems and make decisions. In most cases, analogies are heuristics that aren't completely accurate but are useful nonetheless. A false analogy is inaccurate to the point of being misleading.		
77.	False-consensus effect	In psychology, the false-consensus effect or false-consensus bias is an attributional type of cognitive bias whereby people tend to overestimate the extent to which their opinions, beliefs, preferences, values, and habits are normal and typical of those of others (i.e., that others also think the same way that they do).[1] This cognitive bias tends to lead to the perception of a consensus that does not exist, a "false consensus".	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
78.	False Dilemma	Unnecessarily viewing a situation as a choice between two options when in fact many options exist.		
79.	False memory	A form of *misattribution* where imagination is mistaken for a memory.	4. What should we remember?	We edit and reinforce some memories after the fact
80.	Focusing effect	The focusing effect (or focusing illusion) is a cognitive bias that occurs when people place too much importance on one aspect of an event, causing an error in accurately predicting the utility of a future outcome.	1. Too Much Information	We notice when something has changed
81.	Forer effect	Also called the Barnum effect, is the observation that	3. Need to Act	To act, we must be confident

		individuals will give high accuracy ratings to descriptions of their personality that supposedly are tailored specifically for them but are, in fact, vague and general enough to apply to a wide range of people. This effect can provide a partial explanation for the widespread acceptance of some beliefs and practices, such as astrology, fortune telling, graphology, aura reading and some types of personality tests.	Fast	we can make an impact and feel what we do is important.
82.	Framing effect	The framing effect is an example of cognitive bias, in which people react to a particular choice in different ways depending on how it is presented; e.g. as a loss or as a gain.[1] People tend to avoid risk when a positive frame is presented but seek risks when a negative frame is presented.[2] Gain and loss are defined in the scenario as descriptions of outcomes (e.g. lives lost or saved, disease patients treated and not treated, lives saved and lost during accidents, etc.).	1. Too Much Information	We notice when something has changed
83.	Frequency Illusion	The illusion in which a word, a name, or other thing that has recently come to one's attention suddenly seems to appear with improbable frequency shortly afterwards (not to be confused with the recency illusion or selection bias).[41] This illusion may explain some examples of the Baader-Meinhof Phenomenon, whereby someone hears a new word or phrase repeatedly in a short span of time.	1. Too Much Information	We notice things already primed in memory or repeated often
84.	Functional Fixedness	Functional fixedness is a cognitive bias that limits a person to using an object only in the way it is traditionally used. The concept of functional fixedness originated in Gestalt psychology, a movement in psychology that emphasizes holistic processing.	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
85.	Fundamental attribution error	In social psychology, the fundamental attribution error, also known as the correspondence bias or	3. Need to Act Fast	To act, we must be confident we can make an impact and

		attribution effect, is the tendency for people to place an undue emphasis on internal characteristics of the agent (character or intention), rather than external factors, in explaining another person's behavior in a given situation. This contrasts with interpreting one's own behavior, where situational factors are more easily recognized and can be taken into account.		feel what we do is important.
86.	Funding Bias	Also known as sponsorship bias, funding outcome bias, funding publication bias, and funding effect, refers to the tendency of a scientific study to support the interests of the study's financial sponsor. This phenomenon is recognized sufficiently that researchers undertake studies to examine bias in past published studies. Funding bias has been associated, in particular, with research into chemical toxicity, tobacco, and pharmaceutical drugs.[1] It is an instance of experimenter's bias.		
87.	Gambler's fallacy	The gambler's fallacy, also known as the Monte Carlo fallacy or the fallacy of the maturity of chances, is the mistaken belief that, if something happens more frequently than normal during some period, it will happen less frequently in the future, or that, if something happens less frequently than normal during some period, it will happen more frequently in the future (presumably as a means of *balancing* nature). In situations where what is being observed is truly random (i.e., independent trials of a random process), this belief, though appealing to the human mind, is false. This fallacy can arise in many practical situations although it is most strongly associated with gambling where such mistakes are common among players.	2. Not Enough Meaning	We find stories and patterns even in sparse data
88.	Generation effect (Self-generation effect)	That self-generated information is remembered best. For instance, people are better able to recall memories of statements that they have generated	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.

		than similar statements generated by others.		
89.	Google effect	The tendency to forget information that can be found readily online by using Internet search engines.	4. What should we remember?	We store memories differently on how they are experienced.
90.	Group attribution error	The biased belief that the characteristics of an individual group member are reflective of the group as a whole or the tendency to assume that group decision outcomes reflect the preferences of group members, even when information is available that clearly suggests otherwise.	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories.
91.	Halo effect	The tendency for a person's positive or negative traits to "spill over" from one personality area to another in others' perceptions of them (see also physical attractiveness stereotype).[82]	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
92.	Hard–easy effect	Based on a specific level of task difficulty, the confidence in judgments is too conservative and not extreme enough[5][42][43][44]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
93.	Hasty generalisation	A generalisation based on insufficient evidence.		
94.	Hindsight bias	Sometimes called the "I-knew-it-all-along" effect, the tendency to see past events as being predictable[45] at the time those events happened.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
95.	Hot-hand fallacy	The "hot-hand fallacy" (also known as the "hot hand phenomenon" or "hot hand") is the fallacious belief that a person who has experienced success with a random event has a greater chance of further success in additional attempts.	2. Not Enough Meaning	We find stories and patterns even in sparse data.
96.	Humor effect	That humorous items are more easily remembered than non-humorous ones, which might be explained by the distinctiveness of humor, the increased cognitive processing time to understand the humor, or the emotional arousal caused by the humor.[92]	1. Too Much Information	Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things.

97.	Hyperbolic discounting	Discounting is the tendency for people to have a stronger preference for more immediate payoffs relative to later payoffs. Hyperbolic discounting leads to choices that are inconsistent over time – people make choices today that their future selves would prefer not to have made, despite using the same reasoning.[46] Also known as current moment bias, present-bias, and related to Dynamic inconsistency.	3. Need to Act Fast	To stay focussed, we favour the immediate, relatable, thing in front of us.
98.	Identifiable victim effect	The tendency to respond more strongly to a single identified person at risk than to a large group of people at risk.[47]	3. Need to Act Fast	To stay focussed, we favour the immediate, relatable, thing in front of us.
99.	IKEA effect	The tendency for people to place a disproportionately high value on objects that they partially assembled themselves, such as furniture from IKEA, regardless of the quality of the end result.	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
100.	Illusion of asymmetric insight	People perceive their knowledge of their peers to surpass their peers' knowledge of them.[83]	2. Not Enough Meaning	We think we know what other people are thinking.
101.	Illusion of control	The tendency to overestimate one's degree of influence over other external events.[48]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
102.	Illusion of external agency	When people view self-generated preferences as instead being caused by insightful, effective and benevolent agents	2. Not Enough Meaning	We think we know what other people are thinking.
103.	Illusion of transparency	People overestimate others' ability to know them, and they also overestimate their ability to know others.	2. Not Enough Meaning	We think we know what other people are thinking.
104.	Illusion of validity	Belief that furtherly acquired information generates additional relevant data for predictions, even when it evidently does not.[49]	2. Not Enough Meaning	We find stories and patterns even in sparse data
105.	Illusory correlation	Inaccurately perceiving a relationship between two unrelated events.[50][51]	2. Not Enough Meaning	We find stories and patterns even in sparse data

106.	Illusory superiority	Overestimating one's desirable qualities, and underestimating undesirable qualities, relative to other people. (Also known as "Lake Wobegon effect", "better-than-average effect", or "superiority bias".)[84]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
107.	Illusory truth effect	A tendency to believe that a statement is true if it is easier to process, or if it has been stated multiple times, regardless of its actual veracity. These are specific cases of truthiness.	1. Too Much Information	We notice things already primed in memory or repeated often
108.	Impact bias	The tendency to overestimate the length or the intensity of the impact of future feeling states.[52]		
109.	Information bias	The tendency to seek information even when it cannot affect action.[53]	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
110.	Impact Bias	In affective forecasting, the impact bias, a form of which is the durability bias, is the tendency for people to overestimate the length or the intensity of future feeling states.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
111.	Implicit associations	Unlike *explicit bias* (which reflects the attitudes or beliefs that one endorses at a conscious level), *implicit bias* is the bias in judgment and/or behavior that results from subtle cognitive processes (e.g., implicit attitudes and implicit stereotypes) that often operate at a level below conscious awareness and without intentional control. The underlying implicit attitudes and stereotypes responsible for implicit bias are those beliefs or simple associations that a person makes between an object and its evaluation that "...are automatically activated by the mere presence (actual or symbolic) of the attitude object" (**Dovidio, Gaertner, Kawakami, &**	4. What should we remember?	We discard specifics to form generalities

		Hudson, 2002, p. 94; also **Banaji & Heiphetz, 2010**). Although automatic, implicit biases are not completely inflexible: They are malleable to some degree and manifest in ways that are responsive to the perceiver's motives and environment (**Blair, 2002**).		
112.	Implicit stereotype	An implicit stereotype is the unconscious attribution of particular qualities to a member of a certain social group.[1] Implicit stereotypes are influenced by experience, and are based on learned associations between various qualities and social categories, including race or gender. Individuals' perceptions and behaviors can be affected by implicit stereotypes, even without the individuals' intention or awareness. Implicit stereotypes are an aspect of implicit social cognition, the phenomenon that perceptions, attitudes, and stereotypes operate without conscious intention. The existence of implicit stereotypes is supported by a variety of scientific articles in psychological literature. Implicit stereotype were first defined by psychologists Anthony Greenwald and Mahzarin Banaji in 1995.	4. What should we remember?	We discard specifics to form generalities
113.	Ingroup bias	The tendency for people to give preferential treatment to others they perceive to be members of their own groups.	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
114.	Insensitivity to sample size	The tendency to under-expect variation in small samples.	2. Not Enough Meaning	We find stories and patterns even in sparse data
115.	Intentionality Bias	Intentionality bias refers to the tendency to see intentions in the movements of both animate and inanimate objects. This bias serves us well in most interactions with purposive agents, such as other humans, but even then we often see intentionality or purposiveness where there is none.		

116.	Irrational escalation	The phenomenon where people justify increased investment in a decision, based on the cumulative prior investment, despite new evidence suggesting that the decision was probably wrong. Also known as the sunk cost fallacy.	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
117.	Just-world hypothesis	The tendency for people to want to believe that the world is fundamentally just, causing them to rationalize an otherwise inexplicable injustice as deserved by the victim(s).	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
118.	Knowledge reporting bias	The frequency with which people write about actions, outcomes, or properties is not a reflection of real-world frequencies or the degree to which a property is characteristic of a class of individuals. People write about only some parts of the world around them; much of the information is left unsaid.[2][31]		
119.	Lag effect	The phenomenon whereby learning is greater when studying is spread out over time, as opposed to studying the same amount of time in a single session. See also spacing effect.		
120.	Lake Wobegon effect	Lake Wobegon effect, a natural human tendency to overestimate one's capabilities, was coined by Professor David G Myers in honour of the fictional town.[11] The characterization of the fictional location, where "all the women are strong, all the men are good looking, and all the children are above average," has been used to describe a real and pervasive human tendency to overestimate one's achievements and capabilities in relation to others. To support the view that people in general need to believe that they are above average (the Lake Wobegon effect) one author points out that in a survey of high school students, only 2 percent of the students reported that they were below average in leadership ability.[12] The authors of a study suggest that what they consider the “Lake	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.

		Wobegon effect" can in some cases negatively affect the doctor's treatment advice when, in planning treatment, doctors portray the patients as "above average".[13]		
121.	Language bias	The publication of research findings in a particular language, depending on the nature and direction of the results. There is longstanding question about whether there is a language bias such that investigators choose to publish their negative findings in non-English language journals and reserve their positive findings for English language journals. Some research has shown that language restrictions in systematic reviews can change the results of the review[29] and in other cases, authors have not found that such a bias exists.[30]		
122.	Law of the instrument	"If all you have is a hammer, everything looks like a nail."		
123.	Law of Triviality	Parkinson's law of triviality is C. Northcote Parkinson's 1957 argument that members of an organisation give disproportionate weight to trivial issues.[1] He provides the example of a fictional committee whose job was to approve the plans for a nuclear power plant spending the majority of its time on discussions about relatively minor but easy-to-grasp issues, such as what materials to use for the staff bike-shed, while neglecting the proposed design of the plant itself, which is far more important but also a far more difficult and complex task.	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
124.	Less-is-better effect	The tendency to prefer a smaller set to a larger set judged separately, but not jointly.	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
125.	Leveling and sharpening	Memory distortions introduced by the loss of details in a recollection over time, often concurrent with	4. What should we remember?	We reduce events and lists to their key elements

		sharpening or selective recollection of certain details that take on exaggerated significance in relation to the details or aspects of the experience lost through leveling. Both biases may be reinforced over time, and by repeated recollection or re-telling of a memory.[93]		
126.	Levels-of-processing effect	That different methods of encoding information into memory have different levels of effectiveness.[94]	4. What should we remember?	We store memories differently on how they are experienced.
127.	List-length effect	A smaller percentage of items are remembered in a longer list, but as the length of the list increases, the absolute number of items remembered increases as well.[95][*further explanation needed*]	4. What should we remember?	We reduce events and lists to their key elements
128.	Loss aversion	The disutility of giving up an object is greater than the utility associated with acquiring it.[54] (see also Sunk cost effects and endowment effect).	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
129.	Lucky Streak	A belief that someone who is lucky once has a greater chance of continued luck. In other words, independent probabilities are viewed as having a pattern defined by periods of bad or good luck.		
130.	Magic from technology	There's a known tendency for businesses to view their technology implementations as magic. In other words, technology is often viewed as a black box that is understood in terms of its inputs and outputs. It is common for technology that is not understood to be described as an algorithm or another sufficiently advanced-sounding term.		
131.	Magical Number 7 ± 2	"The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information"[1] is one of the most highly cited papers in psychology.[2][3][4] It was published in 1956 by the cognitive psychologist George A. Miller of Princeton University's Department of Psychology in *Psychological Review*. It is often interpreted to argue that the number of objects an average human can	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.

		hold in working memory is 7 ± 2. This is frequently referred to as *Miller's Law*.		
132.	Masked Man Fallacy	The Fallacy of Illicit Substitution of Identicals—or, more colorfully, "The Masked Man Fallacy"—is an application of Leibniz' Law within an intensional context. The most familiar uses of Substitution of Identicals are mathematical, where the contexts are always extensional. This may mislead one into thinking that substitution is valid in all contexts, but we have seen that this is not the case.	2. Not Enough Meaning	We find stories and patterns even in sparse data
133.	Media bias	Bias or perceived bias of journalists and news producers within the mass media in the selection of events and stories that are reported and how they are covered. The term "media bias" implies a pervasive or widespread bias contravening the standards of journalism, rather than the perspective of an individual journalist or article. The direction and degree of media bias in various countries is widely disputed.		
134.	Mere exposure effect	The tendency to express undue liking for things merely because of familiarity with them.[55]	1. Too Much Information	We notice things already primed in memory or repeated often
135.	Memory inhibition	In psychology, memory inhibition is the ability *not* to remember irrelevant information. The scientific concept of memory inhibition should not be confused with everyday uses of the word "inhibition." Scientifically speaking, memory inhibition is a type of cognitive inhibition, which is the stopping or overriding of a mental process, in whole or in part, with or without intention.[1]	4. What should we remember?	We reduce events and lists to their key elements
136.	Mental Accounting	A concept first named by Richard Thaler, mental accounting (or psychological accounting) attempts to describe the process whereby people code, categorize and evaluate economic outcomes.[1] People may have	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.

		multiple mental accounts for the same kind of resource. A person may use different monthly budgets for grocery shopping and eating out at restaurants, for example, and constrain one kind of purchase when its budget has run out while not constraining the other kind of purchase, even though both expenditures draw on the same fungible resource (income).[2] Similarly, supermarket shoppers spend less money at the market when paying with cash than with their debit cards (and credit cards), even though both cash and debit cards draw on the same economic resource. Comparing the price of goods to a smaller mental account (e.g., the cash in their wallet) than to a larger mental account (e.g., the money in their bank accounts) increases the "pain of payment." [3]		
137.	Misattribution of memory	Memory plays an important role in a number of aspects of our everyday lives and allows us to recall past experiences, navigate our environments, and learn new tasks.[1] Information about a source of memory contains certain characteristics that reflect the conditions under which the memory representations were attained.[2][2] The accuracy of their recall varies depending on the circumstances at which they are retrieved.[2] *Misattribution of memory* refers to the ability to remember information correctly, but being wrong about the source of that information.[3]	4. What should we remember?	We edit and reinforce some memories after the fact
138.	Misinformation effect	Memory becoming less accurate because of interference from *post-event information*.[96]	4. What should we remember?	We reduce events and lists to their key elements
139.	Modality effect	That memory recall is higher for the last items of a list when the list items were received via speech than when they were received through writing.	4. What should we remember?	We reduce events and lists to their key elements
140.	Money illusion	The tendency to concentrate on the nominal value	1. Too Much	We notice when something

		(face value) of money rather than its value in terms of purchasing power.[56]	Information	has changed
141.	Mood-congruent memory bias	The improved recall of information congruent with one's current mood.	1. Too Much Information	We notice things already primed in memory or repeated often
142.	Moral credential effect	The tendency of a track record of non-prejudice to increase subsequent prejudice.	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
143.	Moral luck	The tendency for people to ascribe greater or lesser moral standing based on the outcome of an event.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
144.	Murphy's law	According to Richard Dawkins of the University of Oxford, so-called laws like Murphy's law and Sod's law are nonsense because they require inanimate objects to have desires of their own, or else to react according to one's own desires. Dawkins points out that a certain class of events may occur all the time, but are only noticed when they become a nuisance. He gives as an example aircraft noise interfering with filming. Aircraft are in the sky all the time, but are only taken note of when they cause a problem. This is a form of confirmation bias whereby the investigator seeks out evidence to confirm his already formed ideas, but does not look for evidence that contradicts them.[15]	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.
145.	Naïve cynicism	Expecting more *egocentric bias* in others than in oneself.	1. Too Much Information	We are notice flaws in others more easily than flaws in ourselves
146.	Naïve realism	The belief that we see reality as it really is – objectively and without bias; that the facts are plain for all to see; that rational people will agree with us; and that those who don't are either uninformed, lazy, irrational, or biased.	1. Too Much Information	We are notice flaws in others more easily than flaws in ourselves
147.	Negativity bias or	Psychological phenomenon by which humans have a	1. Too Much	Bizarre/funny/visually-

	Negativity effect	greater recall of unpleasant memories compared with positive memories.[57] [58] (see also actor-observer bias, group attribution error, positivity effect, and negativity effect).[59]	Information 4. What should we remember?	striking/anthropomorphic things stick out more than non-bizarre/unfunny things We discard specifics to form generalities
148.	Neglect of probability	The tendency to completely disregard probability when making a decision under uncertainty.[60]	2. Not Enough Meaning	We find stories and patterns even in sparse data
149.	Next-in-line effect	That a person in a group has diminished recall for the words of others who spoke immediately before himself, if they take turns speaking.[97]	4. What should we remember?	We store memories differently on how they are experienced.
150.	Normalcy bias	The refusal to plan for, or react to, a disaster which has never happened before.	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.
151.	Not invented here	Aversion to contact with or use of products, research, standards, or knowledge developed outside a group. Related to IKEA effect.	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
152.	Observer effect	The observer effect in psychology, also known as the Hawthorne effect, refers to subjects altering their behavior when they are aware that an observer is present. This applies when a psychologist observes his patients or when a person is aware that he is being recorded.	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
153.	Observer-expectancy effect	When a researcher expects a given result and therefore unconsciously manipulates an experiment or misinterprets data in order to find it (see also subject-expectancy effect).	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
154.	Occam's razor	Occam's **razor** (also Ockham's razor; Latin: *lex parsimoniae* "law of parsimony") is a problem-solving principle attributed to William of Ockham (c. 1287–1347), who was an English Franciscan friar, scholastic philosopher and theologian. The principle can be interpreted as stating *Among*	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.

		competing hypotheses, the one with the fewest assumptions should be selected.		
155.	Omission bias	The tendency to judge harmful actions as worse, or less moral, than equally harmful omissions (inactions).[61]	1. Too Much Information	We notice things already primed in memory or repeated often
156.	Optimism bias	The tendency to be over-optimistic, overestimating favorable and pleasing outcomes (see also wishful thinking, valence effect, positive outcome bias).[62][63]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
157.	Ostrich effect	Ignoring an obvious (negative) situation.	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
158.	Outcome bias	The tendency to judge a decision by its eventual outcome instead of based on the quality of the decision at the time it was made.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
159.	Outgroup homogeneity bias	Individuals see members of their own group as being relatively more varied than members of other groups.[85]	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
160.	Overconfidence effect	Excessive confidence in one's own answers to questions. For example, for certain types of questions, answers that people rate as "99% certain" turn out to be wrong 40% of the time.[5][64][65][66]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
161.	Pareidolia	A vague and random stimulus (often an image or sound) is perceived as significant, e.g., seeing images of animals or faces in clouds, the man in the moon, and hearing non-existent hidden messages on records played in reverse.	2. Not Enough Meaning	We find stories and patterns even in sparse data
162.	Part-list cueing effect	That being shown some items from a list and later retrieving one item causes it to become harder to retrieve the other items.[98]	4. What should we remember?	We reduce events and lists to their key elements
163.	Peak-end rule	That people seem to perceive not the sum of an experience but the average of how it was at its peak	4. What should we remember?	We reduce events and lists to their key elements

		(e.g., pleasant or unpleasant) and how it ended.		
164.	Persistence	The unwanted recurrence of memories of a traumatic event.[*citation needed*]		
165.	Pessimism bias	The tendency for some people, especially those suffering from depression, to overestimate the likelihood of negative things happening to them.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
166.	Picture superiority effect	The notion that concepts that are learned by viewing pictures are more easily and frequently recalled than are concepts that are learned by viewing their written word form counterparts.[99][100][101][102][103][104]	1. Too Much Information	Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things
167.	Pessimism bias	The tendency for some people, especially those suffering from depression, to overestimate the likelihood of negative things happening to them.		
168.	Placebo Effect	A placebo is a simulated or otherwise medically ineffectual treatment for a disease or other medical condition intended to deceive the recipient. A person given such an ineffectual treatment will often have a perceived or actual improvement in their condition, a phenomenon commonly called the **placebo effect** or placebo response, and research continues to be carried out on this psychological and physiological response. Several different elements contribute to the effect, and the methods of placebo administration may be as important as the administration itself.[5]	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
169.	Planning fallacy	The tendency to underestimate task-completion times.[52]	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
170.	Positivity effect	That older adults favor positive over negative information in their memories.	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
171.	Post-purchase rationalization	The tendency to persuade oneself through rational argument that a purchase was good value.	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
172.	Prejudice	Prejudice is prejudgement or forming an opinion	4. What should	We discard specifics to form

		before becoming aware of the relevant facts of a case. The word is often used to refer to preconceived, usually unfavorable, judgments toward people or a person because of their gender, beliefs, values, social class, age, disability, religion, sexuality, race/ethnicity, language, nationality, beauty, occupation, education, criminality, sport team affiliation or other personal characteristics. In this case, it refers to a positive or negative evaluation of another person based on their perceived group membership.[1]	we remember?	generalities
173.	Primacy effect, recency effect & serial position effect	That items near the end of a sequence are the easiest to recall, followed by the items at the beginning of a sequence; items in the middle are the least likely to be remembered.[105]	4. What should we remember?	We reduce events and lists to their key elements
174.	Pro-innovation bias	The tendency to have an excessive optimism towards an invention or innovation's usefulness throughout society, while often failing to identify its limitations and weaknesses.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
175.	Processing difficulty effect	That information that takes longer to read and is thought about more (processed with more difficulty) is more easily remembered.[106]	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
176.	Projection bias	The tendency to overestimate how much our future selves share one's current preferences, thoughts and values, thus leading to sub-optimal choices.[67] [68][58]	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
177.	Proportionality bias	The innate tendency to assume that big events have big causes, may also explain our tendency to accept conspiracies. This is one reason many people were uncomfortable with the idea that President John F. Kennedy was the victim of a deranged lone gunman and found it easier to accept the theory that he was the victim of a large-scale conspiracy.		
178.	Pseudocertainty effect	The tendency to make risk-averse choices if the expected outcome is positive, but make risk-seeking	3. Need to Act Fast	To get things done, we tend tp complete things we have

		choices to avoid negative outcomes.[69]		invested time and energy in.
179.	Publication Bias	**A** type of bias that occurs in published academic research. It occurs when the outcome of an experiment or research study influences the decision whether to publish or otherwise distribute it. Publication bias matters because literature reviews regarding support for a hypothesis can be biased if the original literature is contaminated by publication bias.[1] Publishing only results that show a significant finding disturbs the balance of findings.[2]		
180.	Quantitative Fallacy	Making decisions based solely on quantitative observations even when a qualitative observation strongly indicates the decision is wrong. Stems from trust in numbers without regard to their accuracy and relevance.		
181.	Reactance	The urge to do the opposite of what someone wants you to do out of a need to resist a perceived attempt to constrain your freedom of choice (see also Reverse psychology).	3. Need to Act Fast	To avoid mistakes, we are motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions.
182.	Reactive devaluation	Devaluing proposals only because they purportedly originated with an adversary.	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
183.	Recency illusion	The illusion that a word or language usage is a recent innovation when it is in fact long-established (see also frequency illusion).	2. Not Enough Meaning	We find stories and patterns even in sparse data
184.	Regressive bias	A certain state of mind wherein high values and high likelihoods are overestimated while low values and low likelihoods are underestimated.[5][70][71][*unreliable source?*]		
185.	Reminiscence bump	The recalling of more personal events from adolescence and early adulthood than personal events from other lifetime periods[107]		

186.	Reporting bias	In epidemiology, reporting bias is defined as "selective revealing or suppression of information" by subjects (for example about past medical history, smoking, sexual experiences).[1] In artificial intelligence research, the term reporting bias is used to refer to people's tendency to under-report all the information available.[2]		
187.	Restraint bias	The tendency to overestimate one's ability to show restraint in the face of temptation.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
188.	Reverse psychology	Reverse psychology is a technique involving the advocacy of a belief or behavior that is opposite to the one desired, with the expectation that this approach will encourage the subject of the persuasion to do what actually *is* desired: the opposite of what is suggested. This technique relies on the psychological phenomenon of reactance, in which a person has a negative emotional reaction to being persuaded, and thus chooses the option which is being advocated against. The one being manipulated is usually unaware of what is really going on.	3. Need to Act Fast	To avoid mistakes, we are motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions.
189.	Rhyme as reason effect	Rhyming statements are perceived as more truthful. A famous example being used in the O.J Simpson trial with the defense's use of the phrase "If the gloves don't fit, then you must acquit."	3. Need to Act Fast	We favour simple-looking options and complete information over complex, ambiguous options.
190.	Risk compensation / Peltzman effect	The tendency to take greater risks when perceived safety increases.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
191.	Rosy retrospection	The remembering of the past as having been better than it really was.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
192.	Scope Neglect	Ignoring the size of a problem in an evaluation.		
193.	Selective perception	The tendency for expectations to affect perception.	1. Too Much	We are drawn to details that

			Information	confirm our own existing beliefs
194.	Self consistency bias	Incorrectly remembering one's past attitudes and behaviour as resembling present attitudes and behaviour.[90]	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
195.	Self-deception Bias	The process or fact of misleading ourselves to accept claims about ourselves as true or valid when they are false or invalid.' Self-deception, in short, is a way we justify false beliefs about ourselves to ourselves.		
196.	Self-relevance effect	That memories relating to the self are better recalled than similar information relating to others.	1. Too Much Information	Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things
197.	Self-serving bias	The tendency to claim more responsibility for successes than failures. It may also manifest itself as a tendency for people to evaluate ambiguous information in a way beneficial to their interests (see also group-serving bias).[86]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
198.	Semmelweis reflex	The tendency to reject new evidence that contradicts a paradigm.[28]	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
199.	Serial recall effect	Serial position effect is the tendency of a person to recall the first and last items in a series best, and the middle items worst.[1] The term was coined by Hermann Ebbinghaus through studies he performed on himself, and refers to the finding that recall accuracy varies as a function of an item's position within a study list.[2] When asked to recall a list of items in any order (free recall), people tend to begin recall with the end of the list, recalling those items best (the **recency effect**). Among earlier list items, the first few items are recalled more frequently than the middle items (the primacy effect).[3][4]	4. What should we remember?	We reduce events and lists to their key elements

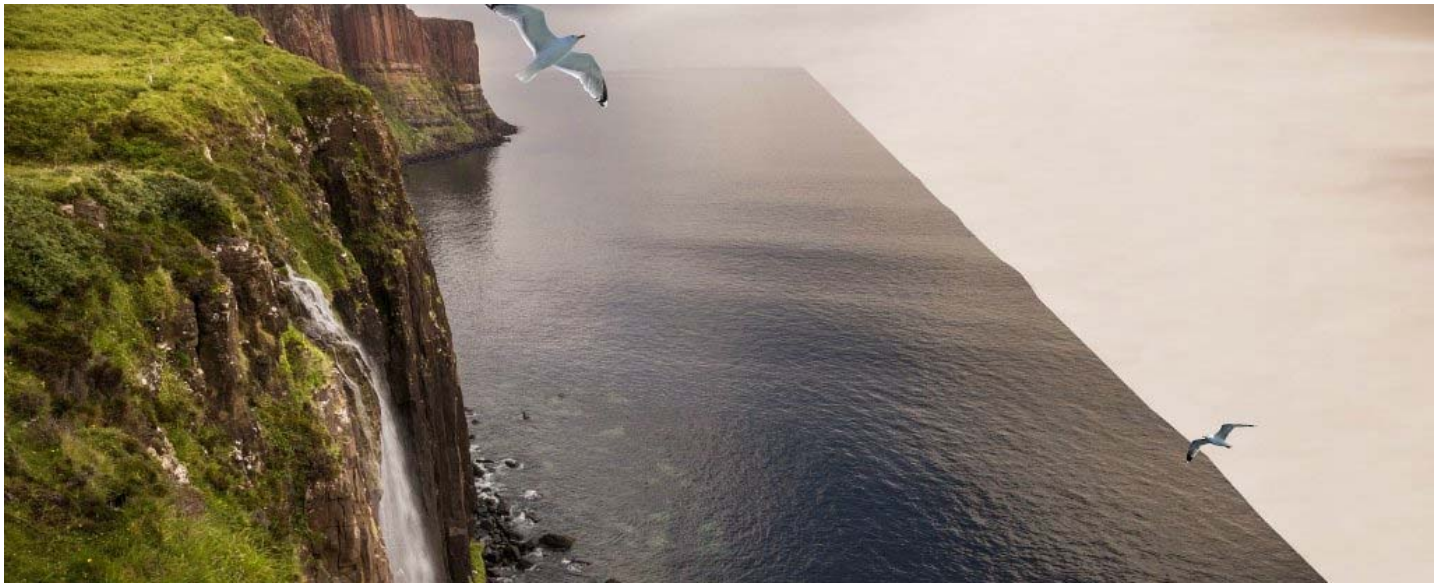
200.	Shared information bias	Known as the tendency for group members to spend more time and energy discussing information that all members are already familiar with (i.e., shared information), and less time and energy discussing information that only some members are aware of (i.e., unshared information).[87]		
201.	Slothful Induction	Failing to draw a conclusion despite ample evidence for it.		
202.	Social comparison bias	The tendency, when making hiring decisions, to favour potential candidates who don't compete with one's own particular strengths.[72]	3. Need to Act Fast	To avoid mistakes, we are motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions.
203.	Social desirability bias	The tendency to over-report socially desirable characteristics or behaviours in oneself and under-report socially undesirable characteristics or behaviours.[73]	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
204.	Sociability bias of language	The disproportionally higher representation of words related to social interactions, in comparison to words related to physical or mental aspects of behavior, in most languages. This bias attributed to nature of language as a tool facilitating human interactions. When verbal descriptors of human behavior are used as a source of information, sociability bias of such descriptors emerges in factor-analytic studies as a factor related to pro-social behavior (for example, of Extraversion factor in the Big Five personality traits [58]		
205.	Sour grapes bias	Sour grapes is a tendency to assume that something a person can't obtain or achieve must have little value. It is a type of cognitive bias that is often explained by a sense of cognitive dissonance that occurs when a person desires something they can't obtain. By assuming that unobtainable things must have little value, this stress is reduced.		

		The term sour grapes originates with a fable about a fox who sees grapes he can't reach so he assumes they must be sour.		
206.	Source confusion	Confusing episodic memories with other information, creating distorted memories.[108]	4. What should we remember?	We edit and reinforce some memories after the fact
207.	Spacing effect	That information is better recalled if exposure to it is repeated over a long span of time rather than a short one.	4. What should we remember?	We edit and reinforce some memories after the fact
208.	Spotlight effect	The tendency to overestimate the amount that other people notice your appearance or behavior.	2. Not Enough Meaning	We think we know what other people are thinking.
209.	Status quo bias	The tendency to like things to stay relatively the same (see also loss aversion, endowment effect, and system justification).[74][75]	3. Need to Act Fast	To avoid mistakes, we are motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions.
210.	Stereotypical bias	Memory distorted towards stereotypes (e.g. racial or gender), e.g. "black-sounding" names being misremembered as names of criminals.[1]	4. What should we remember?	We discard specifics to form generalities
211.	Stereotyping	Expecting a member of a group to have certain characteristics without having actual information about that individual.	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
212.	Subadditivity effect	The tendency to judge probability of the whole to be less than the probabilities of the parts.[76]	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.
213.	Subjective validation	Perception that something is true if a subject's belief demands it to be true. Also assigns perceived connections between coincidences.	1. Too Much Information	We are drawn to details that confirm our own existing beliefs
214.	Suffix effect	Diminishment of the recency effect because a sound item is appended to the list that the subject is *not* required to recall.[109][110]	4. What should we remember?	We reduce events and lists to their key elements
215.	Suggestibility	A form of misattribution where ideas suggested by a questioner are mistaken for memory.	4. What should we remember?	We edit and reinforce some memories after the fact

216.	Sunk cost fallacy	Individuals commit the sunk cost fallacy when they continue a behavior or endeavor as a result of previously invested resources (time, money or effort) (Arkes & Blumer, 1985). This fallacy, which is related to status quo bias, can also be viewed as bias resulting from an ongoing commitment.	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
217.	Survivorship bias	Concentrating on the people or things that "survived" some process and inadvertently overlooking those that didn't because of their lack of visibility.	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.
218.	System justification	The tendency to defend and bolster the status quo. Existing social, economic, and political arrangements tend to be preferred, and alternatives disparaged, sometimes even at the expense of individual and collective self-interest. (See also status quo bias.)	3. Need to Act Fast	To avoid mistakes, we are motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions.
219.	Telescoping effect	The tendency to displace recent events backward in time and remote events forward in time, so that recent events appear more remote, and remote events, more recent.	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.
220.	Testing effect	The fact that you more easily remember information you have read by rewriting it instead of rereading it.[111]	4. What should we remember?	We store memories differently on how they are experienced.
221.	Time lag bias	The rapid or delayed publication of research findings, depending on the nature and direction of the results. In a systematic review of the literature, Hopewell and her colleagues found that overall, trials with “positive results” (statistically significant in favor of the experimental arm) were published about a year sooner than trials with “null or negative results” (not statistically significant or statistically significant in favor of the control arm).[17]		
222.	Time-saving bias	Underestimations of the time that could be saved (or lost) when increasing (or decreasing) from a relatively low speed and overestimations of the time that could be saved (or lost) when increasing (or decreasing)	2. Not Enough Meaning	We project our current mindset and assumptions onto the past and the future.

		from a relatively high speed.		
223.	Tip of the tongue phenomenon	When a subject is able to recall parts of an item, or related information, but is frustratingly unable to recall the whole item. This is thought to be an instance of "blocking" where multiple similar memories are being recalled and interfere with each other.[89]	4. What should we remember?	We store memories differently on how they are experienced.
224.	Third-person effect	Belief that mass communicated media messages have a greater effect on others than on themselves.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
225.	Travis Syndrome	Overestimating the significance of the present.[112] It is related to the enlightenment Idea of Progress and chronological snobbery with possibly an appeal to novelty logical fallacy being part of the bias.		
226.	Trait ascription bias	The tendency for people to view themselves as relatively variable in terms of personality, behavior, and mood while viewing others as much more predictable.	3. Need to Act Fast	To act, we must be confident we can make an impact and feel what we do is important.
227.	Triviality / Parkinson's Law of	The tendency to give disproportionate weight to trivial issues. Also known as bikeshedding, this bias explains why an organization may avoid specialized or complex subjects, such as the design of a nuclear reactor, and instead focus on something easy to grasp or rewarding to the average participant, such as the design of an adjacent bike shed.[77]		
228.	Ultimate attribution error	Similar to the fundamental attribution error, in this error a person is likely to make an internal attribution to an entire group instead of the individuals within the group.	2. Not Enough Meaning	We fill in characteristics from stereotypes, generalities and prior histories
229.	Unit bias	The tendency to want to finish a given unit of a task or an item. Strong effects on the consumption of food in particular.[78]	3. Need to Act Fast	To get things done, we tend tp complete things we have invested time and energy in.
230.	Verbatim effect	That the "gist" of what someone has said is better remembered than the verbatim wording.[113] This is		

		because memories are representations, not exact copies.		
231.	Von Restorff effect	That an item that sticks out is more likely to be remembered than other items[114]	1. Too Much Information	Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things
232.	Weber–Fechner law	Difficulty in comparing small differences in large quantities.	1. Too Much Information	We notice when something has changed
233.	Well travelled road effect	Underestimation of the duration taken to traverse oft-traveled routes and overestimation of the duration taken to traverse less familiar routes.	2. Not Enough Meaning	We imagine things and people we are familiar with, or fond of, as being better.
234.	Worse-than-average effect	A tendency to believe ourselves to be worse than others at tasks which are difficult.[88]		
235.	Zeigarnik effect	That uncompleted or interrupted tasks are remembered better than completed ones.		
236.	Zero-risk bias	Preference for reducing a small risk to zero over a greater reduction in a larger risk.	3. Need to Act Fast	To get things done, we tend to complete things we have invested time and energy in.
237.	Zero-sum bias	A bias whereby a situation is perceived to be like a zero-sum game (i.e., one person gains at the expense of another).	2. Not Enough Meaning	We simplify probabilities and numbers to make them easier to think about.



Researchers say they've figured out what makes people reject science, and it's not ignorance

Why some people believe Earth is flat.

FIONA MACDONALD 23 JAN 2017

A lot happened in 2016, but one of the biggest cultural shifts was the rise of fake news - where claims with no evidence behind them (e.g. the world is flat) get shared as fact alongside evidence-based, peer-reviewed findings (e.g. climate change is happening).

Researchers have coined this trend the 'anti-enlightenment movement', and there's been a lot of frustration and finger-pointing over who or what's to blame. But a team of psychologists has identified some of the key factors that can cause people to reject science - and it has nothing to do with how educated or intelligent they are.

In fact, the researchers found that people who reject scientific consensus on topics such as climate change, vaccine safety, and evolution are generally just as interested in science and as well-educated as the rest of us.

The issue is that when it comes to facts, people think more like lawyers than scientists, which means they 'cherry pick' the facts and studies that back up what they already believe to be true.

So if someone doesn't think humans are causing climate change, they will ignore the hundreds of studies that support that conclusion, but latch onto the one study they can find that casts doubt on this view. This is also known as cognitive bias.

"We find that people will take a flight from facts to protect all kinds of belief including their religious belief, their political beliefs, and even simple personal beliefs such as whether they are good at choosing a web browser," said one of the researchers, Troy Campbell from the University of Oregon.

"People treat facts as relevant more when the facts tend to support their opinions. When the facts are against their opinions, they don't necessarily deny the facts, but they say the facts are less relevant."

This conclusion was based on a series of new interviews, as well as a meta-analysis of the research that's been published on the topic, and was presented in a symposium called over the weekend as part of the Society for Personality and Social Psychology annual convention in San Antonio.

The goal was to figure out what's going wrong with science communication in 2017, and what we can do to fix it.

The research has yet to be published, so isn't conclusive, but the results suggest that simply focussing on the evidence and data isn't enough to change someone's mind about a particular topic, seeing as they'll most likely have their own 'facts' to fire back at you.

"Where there is conflict over societal risks - from climate change to nuclear-power safety to impacts of gun control laws, both sides invoke the mantel of science," said one of the team, Dan Kahan from Yale University.

Instead, the researchers recommend looking into the 'roots' of people's unwillingness to accept scientific consensus, and try to find common ground to introduce new ideas.

So where is this denial of science coming from? A big part of the problem, the researchers found, is that people associate scientific conclusions with political or social affiliations.

New research conducted by Kahan showed that people have actually always cherry picked facts when it comes to science - that's nothing new. But it hasn't been such a big problem in the past, because scientific conclusions were usually agreed on by political and cultural leaders, and promoted as being in the public's best interests.

Now, scientific facts are being wielded like weapons in a struggle for cultural supremacy, Kahan told Melissa Healy over at the *LA Times*, and the result is a "polluted science communication environment".

So how can we do better?

"Rather than taking on people's surface attitudes directly, tailor the message so that it aligns with their motivation," said Hornsey. "So with climate skeptics, for example, you find out what they can agree on and then frame climate messages to align with these."

The researchers are still gathering data for a peer-reviewed publication on their findings, but they presented their work to the scientific community for further dissemination and discussion in the meantime.

Hornsey told the *LA Times* that the stakes are too high to continue to ignore the 'anti-enlightenment movement'.

"Anti-vaccination movements cost lives," said Hornsey. "Climate change skepticism slows the global response to the greatest social, economic and ecological threat of our time."

"We grew up in an era when it was just presumed that reason and evidence were the ways to understand important issues; not fear, vested interests, tradition or faith," he added.

"But the rise of climate skepticism and the anti-vaccination movement made us realise that these enlightenment values are under attack."